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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,446	12/27/2005	Hideaki Matsuhashi	2005_1875A	3477

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SUITE 800
WASHINGTON, DC 20006

EXAMINER

DAVIS, MARY ALICE

ART UNIT	PAPER NUMBER
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3748

MAIL DATE	DELIVERY MODE
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08/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/562,446

Applicant(s)

MATSUHASHI, HIDEAKI

Examiner

Mary A. Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/6/07.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the end milling (claim 16), and scroll fixed in a chuck (claim 16) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The substitute specification filed June 6, 2007 is acceptable.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claim 14 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,237,992 B2.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims both deal with the method of machining a scroll using a non-rotational tool.

6. Claim 15 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,237,992 B2.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 15 further limits the non-rotational tool to have a length greater than the height of the scroll, which is an obvious configuration since the non-

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rotational tool machines the side face of the scroll with the tool not rotating, it is inherent that the tool would have to be taller in order to machine in the claimed manner.

7. Claim 16 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,237,992 B2 in view of MCCULLOUGH (U.S. Patent 4,512,066). U.S. Patent No. 7,237,992 B2 discloses the claimed invention in claim 1, however, fails to disclose an end-milling step and maintaining the scroll in a chuck while performing both the machining by the non-rotational tool and the end milling. MCCULLOUGH ET AL discloses end milling (Column 5, line 38 – Column 6, line 19) and using an index table so that the parts can be machined and end milled while remaining fixed in a chuck (see Figures 3A-4D, and Column 10, lines 18-32. MCCULLOUGH discloses a use of a rotating indexing table (Column 7, line 58 - Column 8, line 4), which would allow the parts to be processed without removal from the machine. Furthermore, since the parts are not removed from the machine, it is inherent that the parts are fixed in a chuck, in order to secure them to be machined.) It would have been obvious to one of ordinary skill in the art at the time of the invention to have an end mill step, in order to aid in machining the scroll with a better surface finish.

In the alternative, Claim 16 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,237,992 B2 in view of FUKUHARA ET AL (Japanese Patent Publication Number 2001-032786). U.S. Patent No. 7,237,992 B2 discloses the claimed invention in claim 1, however, fails to disclose an end-milling step and maintaining the scroll in a chuck

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while performing both the machining by the non-rotational tool and the end milling.

FUKUHARA ET AL discloses end milling and maintaining the scroll in the chuck to perform other machining operations (see Detailed Description, Page 5, ¶30 - ¶31). It would have been obvious to one of ordinary skill in the art at the time of the invention to have an end mill step and to keep a part fixed in a chuck, in order to aid in machining the scroll with a better surface finish (see Detailed Description, Page 5, ¶31).

8. Claim 17 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,237,992 B2 in view of MCCULLOUGH. U.S. Patent 7,237,992 B2 discloses the claimed invention in claim 1 including a non-rotational tool performing a Hale-machining operation, however, fails to disclose utilizing a different non-rotational tool to perform a finishing cut while remaining fixed in a chuck. MCCULLOUGH teaches how multiple non-rotational tools are used to perform a first cut, an intermediate cut, and a finishing cut (see Figures 20-22), and that a part can be machined and finished fixed in a chuck (since MCCULLOUGH utilizes an index table which moves the part from one machining station to the next (see discussion above)). It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have utilized a finishing cut, in order to obtain the desired dimensions.

9. Claim 18 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,237,992 B2.

Although the conflicting claims are not identical, they are not patentably distinct from

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each other because they both claim machining the end/base plate with the same non-rotational tool used to machine the scroll wraps.

10. Claim 19 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,237,992 B2 in view of legal precedent. Claim 1 discloses the claimed invention except for utilizing one non-rotating tool to machine the end/base plate and the scroll wraps. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used one non-rotating tool to machine the end/base plate and another non-rotating tool to machine the scroll wraps, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. In re Dulberg, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961).

11. Claim 20 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,237,992 B2.

Although the conflicting claims are not identical, they are not patentably distinct from each other because Patent Number 7,237,992 B2 claims machining the scroll wrap with a non-rotational tool, it would be obvious to one of ordinary skill in the art to machine both the inner face and outer face of the scroll wrap and to machine in any order of machining the inner face and then the outer face.

12. Claim 21 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,237,992 B2.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 21 has claim limitations to the resultant surface roughness. A

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design resultant of the method of machining does not further limit the claim, and furthermore, the claimed design result is obtained by 7,237,992 B2, as disclosed in that specification.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary A. Davis whose telephone number is (571) 272-9965. The examiner can normally be reached on Monday thru Friday; (Second Friday off) 7am - 3pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

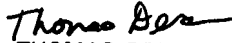
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MAD

/Mary A. Davis/

August 8, 2007

Patent Examiner Art Unit: 3748


THOMAS DENION
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700